

Remarks

Claims 11 through 23 stand rejected under 35 USC 103(a) as being unpatentable over Clark '066 in view of Cree '149 and McAmish '125.

In responding to these rejections, the Applicant has amended the independent claims of record to clarify recitation of the melt connections. The independent claims had previously specified "wherein no or only few melt connections are provided between said melt-blown fibers and said particular superabsorbing material". The Applicant has changed this recitation to "wherein substantially no melt connections are provided...". The recitation of "substantially no melt connections" means that the mechanical and other properties of the sanitary product are essentially identical to the properties of a product having no melt connections whatsoever. The word "substantially" has only been introduced to take into consideration the fact that, although the intention of the manufacturing process producing the claimed article is to avoid all melt connections, no manufacturing process is perfect and it is consequently not possible to assure a complete absence of melt connections. By reciting "substantially no melt connections" the Applicant therefore claims a product whose essential characteristics are identical to those of a theoretically produced particle without any melt connections. In any event, the Applicant submits that the independent claims of record are clearly distinguished from the prior art cited in the subject Office Action for the following reasons.

The independent claims of record recite ranges which the Examiner states are anticipated by the prior art of record. With regard to the patentability of ranges and the disclosure content of prior art with respect to such ranges, the Examiner is respectfully referred to the relevant portion of MPEP 2131.03, portions of which are quoted as follows:

"PRIOR ART WHICH TEACHES A RANGE OVERLAPPING OR TOUCHING THE CLAIMED RANGE ANTICIPATES IF THE PRIOR ART RANGE DISCLOSES THE CLAIMED RANGE WITH "SUFFICIENT SPECIFICITY"

When the prior art discloses a range which touches or overlaps the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. If the claims are directed to a narrow range, and the reference teaches a broad range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. See, e.g., *Atofina v. Great Lakes Chem. Corp*, 441 F.3d 991, 999, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006) wherein the court held that a reference temperature range of 100-500 degrees C did not describe the claimed range of 330-450 degrees C with sufficient specificity to be anticipatory. Further, while there was a slight overlap between the reference's preferred range (150-350 degrees C) and the claimed range, that overlap was not sufficient for anticipation. "The disclosure of a range is no more a disclosure of the end points of the range than it is each of the intermediate points." *Id.* at 1000, 78 USPQ2d at 1424. Any evidence of unexpected results within the narrow range may also render the claims unobvious. The question of "sufficient specificity" is similar to that of "clearly envisaging" a species from a generic teaching. See MPEP § 2131.02. A 35 U.S.C. 102/103 combination rejection is permitted if it is unclear if the reference teaches the range with "sufficient specificity." The examiner must, in this case,

provide reasons for anticipation as well as a motivational statement regarding obviousness. *Ex parte Lee*, 31 USPQ2d 1105 (Bd. Pat. App. & Inter. 1993) (expanded Board). For a discussion of the obviousness of ranges see MPEP § 2144.05."

In the particular case at hand, the independent of claims of record state that the mass per unit area of the melt blown microfibers is between 6 and 25 g/m². In rejecting this element over prior art, the Examiner has referred to the recitation of McAmish in column 4 lines 61 through 64. However, in that portion of McAmish, the recited basis weight of 6 g/m² merely touches the lower portion of the range recited in the independent claims of record. At the end of column 4 continuing to the beginning to column 5, McAmish proposes a preferred embodiment in which 3 g/m² are suggested for the basis weight. Moreover, this portion of the McAmish reference refers to a veneer cover made from at least 7 microns in diameter melt blown fibers deposited on a melt blown microfiber core web. Moreover, McAmish is thereby concerned with a completely different object than that of the instant invention, namely trying to increase the strength of a surface region in conjunction with a microfiber core web. McAmish achieves this goal by using a cover of melt blown fibers of somewhat larger diameter. Therefore, McAmish fails to teach the claimed range of 6 to 25 g/m² with specific specificity, since McAmish suggests a range of 3 to 6 g/m² for use in a completely different context. Therefore, in accordance with the above mentioned case law, McAmish cannot be utilized to provide motivation for the entire range claimed which includes not only the 6 g/m² but also 25 g/m². This feature is simply missing from the prior art of record.

The independent claims of record also recite a 70 to 95 percent weight of particulate superabsorbing material in the absorbent body. In rejecting this particular element, the Examiner refers to the fact that Clark discloses a range of 5 to 90 percent of superabsorbing material. The

Applicant respectfully disagrees. The range given by Clark of between 5 to 90 percent differs only slightly from a maximum range of 0 to 100 percent. However, a range of 0 to 100 percent provides no teaching whatsoever concerning a preferred portion of superabsorbing materials. Moreover, Clark indicates that his preferred ranges lie between 10 to 60 percent, 20 to 50 percent and 30 to 40 percent (see in particular paragraph 45 of Clark as well as of claims 14 through 16). These ranges are far removed from the claimed range of 70 to 95 percent and clearly teach away from that narrow range recited in the independent claims. In fact, Clark provides no motivation for the narrow range and does not teach that range with sufficient specificity to satisfy the requirements of the above mentioned case law. Therefore, this feature is also missing from the prior art of record.

The independent claims of record specify substantially no melt connections between the melt blown fibers and the particulate super absorbing material. This recitation deviates substantially from the teaching of Clark for the following reasons. Referring, for example, to the abstract, Clark states that " the multi-component fibers have a low melting point sheath which can be fully activated to melt and wet the absorbent particles. The web can then be densified and cooled, securing the absorbents to the web...". Therefore, Clark teaches precisely away from the invention by proposing establishment of connections between the melt blown microfibers and the particulate superabsorbent material. In describing his procedures in paragraphs 50 to 53 in conjunction with figure 1, the SAP particles of Clark are blown below a fine fiber distribution unit reference symbol 24 "at a point below the fiber diversion point (paragraph 50)". In this manner Clark, generates a particle-fiber mixture (see paragraph 53) which is heated in such a fashion as to "... fully activated the sheath polymer to a liquid state whereby the sheath polymer may wet the absorbent particles and form hardened flow joints upon cooling to secure the absorbent particles within the web". Clark

therefore proposes fully freezing the SAP particles within a web of melt blown fibers to which the particles are attached and therefore teaches precisely away from the invention as claimed, since the invention proposes substantially no melt connections between the melt blown fibers and the particulate superabsorbent material.

The claim language also recites a wet stage strength of at least 40 percent of a dry stage strength in the independent claims. In rejecting this particular element of the independent claims, the Examiner states that, since the structure of Clark is substantially identical to that of the instant invention, the wet strength should also be substantially identical. The Applicant respectfully disagrees. In particular, Clark teaches a melt connection between the melt blown fibers and the particular superabsorbing material and the invention teaches the avoidance of precisely those connections. This substantial structural difference between the invention as claimed and the Clark prior art leads to substantially different properties of the article in the wet state. Since the melt blown fibers are attached to the SAP particles, the web of Clark can more easily rupture compared to the web of the instant invention as now claimed, since the SAP particles swell in response to the absorption of liquids and can thereby break or damage the Clark melt connections to the microfibers. There is therefore no reason to believe that the Clark article has a wet strength which is at least 40 percent of a dry state strength as claimed. This feature must therefore be considered a structural limitation of the article claimed using functional language and must be given patentable weight per se and not through inference. Since Clark does not disclose the wet strength of his article and since the structure of Clark is substantially different than that of the claimed invention, the wet strength limitation is missing from the prior art of record (see in particular the middle of page 3 of the specification of the instant invention as well as page 10 third paragraph to page 11 first paragraph).

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The invention as claimed recites a plurality of elements missing from the prior art of record. Moreover, the prior art of record, taken neither alone nor in combination, fails to provide any motivation for those limitations. The Applicant therefore respectfully submits that the US PTO has failed to provide a prima facie case of obviousness in this application and therefore requests reconsideration and passage to issuance.

No new matter has been added in this amendment.

Respectfully submitted,

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